ABSTRACT OF THE DISCLOSURE

A technique implements a MAC address pool containing a plurality of unique MAC addresses adapted for assignment to a virtual interface or aggregate of a server in a computer network. The MAC address pool is created from original MAC addresses as-

5 signed to physical interfaces of a network interface card (NIC) that is used in the server. The physical interfaces and their underlying physical links are organized as the aggregate. Upon system initialization, a virtual interface process of the server collects the originally assigned MAC addresses of the NIC, modifies them and organizes them as a pool. Each originally assigned MAC address is modified by asserting its locally admin-

10 istered bit. Each modified MAC address is a distinct MAC address that does not conflict with other MAC addresses within, e.g., a local area network of the computer network.